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 RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/700,708

 DATE: 01/31/2002
 TIME: 08:46:17

 Input Set : A:\US09700708.raw
 Output Set: N:\CRF3\01312002\I700708.raw

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APR 12 2002

Technology Center 2100

1 <110> APPLICANT: ITAI, Akiko
 2 ITAI, Reiko
 3 TOMIOKA, Nobuo
 4 <120> TITLE OF INVENTION: Method For Predicting Functions of Protein
 5 <130> FILE REFERENCE: P20294
 6 <140> CURRENT APPLICATION NUMBER: US/09/700,708
 C--> 7 <141> CURRENT FILING DATE: 2001-02-20
 8 <150> PRIOR APPLICATION NUMBER: PCT/JP98/02302
 9 <151> PRIOR FILING DATE: 1998-05-26
 10 <160> NUMBER OF SEQ ID NOS: 6
 11 <170> SOFTWARE: PatentIn version 3.0
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 159
 15 <212> TYPE: PRT
 16 <213> ORGANISM: Escherichia coli
 17 <400> SEQUENCE: 1
 18 Met Ile Ser Leu Ile Ala Ala Leu Ala Val Asp Arg Val Ile Gly Met
 19 1 5 10 15
 20 Glu Asn Ala Met Pro Trp Asn Leu Pro Ala Asp Leu Ala Trp Phe Lys
 21 20 25 30
 22 Arg Asn Thr Leu Asp Lys Pro Val Ile Met Gly Arg His Thr Trp Glu
 23 35 40 45
 24 Ser Ile Gly Arg Pro Leu Pro Gly Arg Lys Asn Ile Ile Leu Ser Ser
 25 50 55 60
 26 Gln Pro Gly Thr Asp Asp Arg Val Thr Trp Val Lys Ser Val Asp Glu
 27 65 70 75 80
 28 Ala Ile Ala Ala Cys Gly Asp Val Pro Glu Ile Met Val Ile Gly Gly
 29 85 90 95
 30 Gly Arg Val Tyr Glu Gln Phe Leu Pro Lys Ala Gln Lys Leu Tyr Leu
 31 100 105 110
 32 Thr His Ile Asp Ala Glu Val Glu Gly Asp Thr His Phe Pro Asp Tyr
 33 115 120 125
 34 Glu Pro Asp Asp Trp Glu Ser Val Phe Ser Glu Phe His Asp Ala Asp
 35 130 135 140
 36 Ala Gln Asn Ser His Ser Tyr Cys Phe Lys Ile Leu Glu Arg Arg
 37 145 150 155
 39 <210> SEQ ID NO: 2
 40 <211> LENGTH: 223
 41 <212> TYPE: PRT
 42 <213> ORGANISM: Bovine
 43 <400> SEQUENCE: 2
 44 Ile Val Gly Gly Tyr Thr Cys Gly Ala Asn Thr Val Pro Tyr Gln Asx
 45 1 5 10 15

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46      Ser Leu Asn Ser Gly Tyr His Phe Cys Gly Gly Ser Leu Ile Asn Ser
47              20                      25                      30
48      Gln Trp Val Val Ser Ala Ala His Cys Tyr Lys Ser Gly Ile Gln Val
49              35                      40                      45
50      Arg Leu Gly Glu Asp Asn Ile Asn Val Asx Glu Gly Asn Glu Gln Phe
51              50                      55                      60
52      Ile Ser Ala Ser Lys Ser Ile Val His Pro Ser Tyr Asn Ser Asn Thr
53              65                      70                      75                      80
54      Leu Asn Asn Asp Ile Met Leu Ile Lys Leu Lys Ser Ala Ala Ser Leu
55              85                      90                      95
56      Asn Ser Arg Val Ala Ser Ile Ser Leu Pro Thr Ser Cys Ala Ser Ala
57              100                     105                     110
58      Gly Thr Gln Cys Leu Ile Ser Gly Trp Gly Met Thr Lys Ser Ser Gly
59              115                     120                     125
60      Thr Ser Tyr Pro Asp Asx Leu Lys Cys Leu Lys Ala Pro Ile Leu Ser
61              130                     135                     140
62      Asp Ser Ser Cys Lys Ser Ala Tyr Pro Gly Gln Ile Thr Ser Asn Met
63              145                     150                     155                     160
64      Phe Cys Ala Gly Tyr Leu Glu Gly Gly Lys Asp Ser Cys Gln Gly Asp
65              165                     170                     175
66      Cys Gly Gly Pro Val Val Cys Ser Gly Lys Leu Gln Gly Ile Val Ser
67              180                     185                     190
68      Trp Gly Ser Gly Cys Ala Gln Lys Asn Lys Pro Gly Val Tyr Thr Lys
69              195                     200                     205
70      Val Cys Asn Tyr Val Ser Trp Ile Lys Gln Thr Ile Ala Ser Asn
71              210                     215                     220

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73 <210> SEQ ID NO: 3

74 <211> LENGTH: 124

75 <212> TYPE: PRT

76 <213> ORGANISM: Bovine

77 <400> SEQUENCE: 3

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78      Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp Ser Ser
79      1              5              10              15
80      Thr Ser Ala Ala Ser Ser Ser Asn Tyr Cys Asn Gln Met Met Lys Ser
81              20              25              30
82      Arg Asn Leu Thr Lys Asp Arg Cys Lys Pro Val Asn Thr Phe Val His
83              35              40              45
84      Glu Ser Leu Ala Asp Val Gln Ala Val Cys Ser Gln Lys Asn Val Ala
85              50              55              60
86      Cys Lys Asn Gly Gln Thr Asn Cys Tyr Gln Ser Tyr Ser Thr Met Ser
87              65              70              75              80
88      Ile Thr Asp Cys Arg Glu Thr Gly Ser Ser Lys Tyr Pro Asn Cys Ala
89              85              90              95
90      Tyr Lys Thr Thr Gln Ala Asn Lys His Ile Ile Val Ala Cys Glu Gly
91              100             105             110
92      Asn Pro Tyr Val Pro Val His Phe Asp Ala Ser Val
93              115             120

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95 <210> SEQ ID NO: 4

96 <211> LENGTH: 153

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97 <212> TYPE: PRT
98 <213> ORGANISM: Whale
99 <400> SEQUENCE: 4
100   Val Leu Ser Glu Gly Glu Trp Gln Leu Val Leu His Val Trp Ala Lys
101       1               5               10               15
102   Val Glu Ala Asp Val Ala Gly His Gly Gln Asp Ile Leu Ile Arg Leu
103               20               25               30
104   Phe Lys Ser His Pro Glu Thr Leu Glu Lys Phe Asp Arg Phe Lys His
105               35               40               45
106   Leu Lys Thr Glu Ala Glu Met Lys Ala Ser Glu Asp Leu Lys Lys His
107               50               55               60
108   Gly Val Thr Val Leu Thr Ala Leu Gly Ala Ile Leu Lys Lys Lys Gly
109               65               70               75               80
110   His His Glu Ala Glu Leu Lys Pro Leu Ala Gln Ser His Ala Thr Lys
111               85               90               95
112   His Lys Ile Pro Ile Lys Tyr Leu Glu Phe Ile Ser Glu Ala Ile Ile
113               100              105              110
114   His Val Leu His Ser Arg His Pro Gly Asp Phe Gly Ala Asp Ala Gln
115               115              120              125
116   Gly Ala Met Asn Lys Ala Leu Glu Leu Phe Arg Lys Asp Ile Ala Ala
117               130              135              140
118   Lys Tyr Lys Glu Leu Gly Tyr Gln Gly
119       145              150
121 <210> SEQ ID NO: 5
122 <211> LENGTH: 186
123 <212> TYPE: PRT
124 <213> ORGANISM: Human
125 <400> SEQUENCE: 5
126   Val Gly Ser Leu Asn Cys Ile Val Ala Val Ser Gln Asn Met Gly Ile
127       1               5               10               15
128   Gly Lys Asn Gly Asp Leu Pro Trp Pro Pro Leu Arg Asn Glu Phe Arg
129               20               25               30
130   Tyr Phe Gln Arg Met Thr Thr Thr Ser Ser Val Glu Gly Lys Gln Asn
131               35               40               45
132   Leu Val Ile Met Gly Lys Lys Thr Trp Phe Ser Ile Pro Glu Lys Asn
133               50               55               60
134   Arg Pro Leu Lys Gly Arg Ile Asn Leu Val Leu Ser Arg Glu Leu Lys
135               65               70               75               80
136   Glu Pro Pro Gln Gly Ala His Phe Leu Ser Arg Ser Leu Asp Asp Ala
137               85               90               95
138   Leu Lys Leu Thr Glu Gln Pro Glu Leu Ala Asn Lys Val Asp Met Val
139               100              105              110
140   Trp Ile Val Gly Gly Ser Ser Val Tyr Lys Glu Ala Met Asn His Pro
141               115              120              125
142   Gly His Leu Lys Leu Phe Val Thr Arg Ile Met Gln Asp Phe Glu Ser
143               130              135              140
144   Asp Thr Phe Phe Pro Glu Ile Asp Leu Glu Lys Tyr Lys Leu Leu Pro
145       145              150              155              160
146   Glu Tyr Pro Gly Val Leu Ser Asp Val Gln Glu Glu Lys Gly Ile Lys

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147                               165                               170                               175
148      Tyr Lys Phe Glu Val Tyr Glu Lys Asn Asp
149                               180                               185
151 <210> SEQ ID NO: 6
152 <211> LENGTH: 186
153 <212> TYPE: PRT
154 <213> ORGANISM: Escherichia coli
155 <400> SEQUENCE: 6
156      Val Gly Ser Leu Ser Leu Ile Ala Ala Leu Ala Gln Asn Met Gly Ile
157      1                               5                               10                               15
158      Gly Lys Asn Gly Asp Leu Pro Trp Pro Pro Leu Pro Ala Asp Leu Ala
159      20                               25                               30
160      Trp Phe Lys Arg Asn Thr Leu Asp Lys Ser Val Glu Gly Lys Gln Asn
161      35                               40                               45
162      Leu Val Ile Met Gly Arg His Thr Trp Glu Ser Ile Gly Arg Pro Leu
163      50                               55                               60
164      Pro Gly Arg Lys Gly Arg Ile Asn Leu Val Leu Ser Arg Glu Leu Lys
165      65                               70                               75                               80
166      Glu Pro Pro Gln Gly Ala His Phe Leu Ser Arg Ser Leu Asp Asp Ala
167      85                               90                               95
168      Leu Lys Leu Thr Glu Gln Pro Glu Leu Ala Asn Lys Val Asp Met Val
169      100                               105                               110
170      Met Val Ile Gly Gly Gly Ser Val Tyr Lys Glu Ala Met Asn His Pro
171      115                               120                               125
172      Gly His Leu Lys Leu Tyr Leu Thr His Ile Met Gln Asp Phe Glu Ser
173      130                               135                               140
174      Asp Thr Phe Phe Pro Glu Ile Asp Leu Glu Lys Tyr Lys Leu Leu Pro
175      145                               150                               155                               160
176      Glu Tyr Pro Gly Val Leu Ser Asp Val Gln Glu Glu Lys Gly Ile Lys
177      165                               170                               175
178      Tyr Lys Phe Glu Val Tyr Glu Lys Asn Asp
179      180                               185

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/700,708

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Input Set : A:\US09700708.raw

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L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date